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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,961	03/26/2004	Gregory P. Ziarnik	200313316-1	9822

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HEWLETT PACKARD COMPANY  
P O BOX 272400, 3404 E. HARMONY ROAD  
INTELLECTUAL PROPERTY ADMINISTRATION  
FORT COLLINS, CO 80527-2400

EXAMINER

CIRIC, LJILJANA V

ART UNIT PAPER NUMBER

3744

MAIL DATE DELIVERY MODE

09/25/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/810,961

Applicant(s)

ZIARNIK ET AL.

Examiner

Ljiljana (Lil) V. Ciric *AVC*

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 6,7,16-20 and 22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5,10-15 and 21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>20040326</u> . | 6) <input type="checkbox"/> Other: _____  |

***Election/Restrictions***

1. Applicant's election without traverse of the second species or the embodiment of Figures 3 and 4 in the reply filed on October 23, 2006 is acknowledged. Claims 1 through 5, 10 through 15, and 21 are readable on the elected species. Contrary to applicant's statement, however, claim 8 does not appear to read on the elected species.
2. Claims 6 through 9, 16 through 20, and 22 are hereby withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on October 23, 2006.

***Drawings***

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the inverter as recited in 14 must be shown or the feature canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

*Specification*

4. The abstract of the disclosure is objected to because it does not avoid using phrases which can be implied (i.e., “are provided” appearing in the first sentence). Note that the first sentence of an abstract does not have to be a grammatically complete sentence, and so “are provided” can simply be omitted from the first sentence of the abstract. Also, it is recommended that “Systems” in the last sentence be replaced with “Corresponding systems” for improved clarity. Correction is required. See MPEP § 608.01(b).

*Claim Rejections - 35 USC § 112*

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1 through 5, 10 through 15, and 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With regard to claim 1 as written, it is not clear whether the limitation “a temperature threshold for operating the fan at greater than low speed” refers to a threshold operating temperature for the fan, to a threshold operating temperature for the processor, or to an ambient threshold temperature, thus rendering indefinite the metes and bounds of protection sought by claim 1 and claims 2 through 5 depending therefrom.

Also with regard to claim 1 as written, it is not clear whether the limitation “the temperature” in line 5 of the claim refers back to the previously cited determined temperature of the computer system or to the previously cited temperature threshold, thus further rendering indefinite the metes and bounds of protection sought by claim 1 and claims 2 through 5 depending therefrom. The limitation “the temperature” appearing in line 7 of claim 10 and in line 7 of claim 21 similarly renders indefinite both each of claims 10 and 21 and claims 11 through 15 depending from claim 10.

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With regard to each of claims 15 and 21 as written, it is not clear which structural equivalents correspond to the "means for throttling the processor" as recited in each of these claims. The specification fails to set forth any structural equivalents for this means-plus-function limitations as required.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. As best can be understood in view of the indefiniteness of the claims, claims 1 through 5, 10, 11, 13, 15, and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Watts, Jr. et al. (US 2002/0152406).

Watts, Jr. et al. discloses a method and corresponding apparatus for cooling/thermally managing a computer system essentially as claimed, the computer system having a processor or CPU 12, a multi-speed fan 18, and a temperature probe or sensor 24 for operative to generate a signal indicative of a temperature of the processor or CPU 12. Watts, Jr. et al. furthermore discloses temperature-dependent throttling of the processor or CPU 12 as well as temperature-dependent operation of the fan 18. See, for example, column 8, lines 34-46.

The reference thus reads on the claims.

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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10. As best can be understood in view of the indefiniteness of the claims, claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Watts, Jr. et al. (US 2002/0152406).

As described in greater detail above, Watts, Jr. et al. discloses a method and corresponding apparatus for cooling/thermally managing a computer system essentially as claimed, including a temperature probe or sensor 24. While Watts, Jr. et al. does not specifically identify the type of sensor used as temperature probe 24, Official Notice is hereby taken that it is known in the art of temperature measurement to use thermal diodes as temperature sensors or probes. Thus, it would have been obvious to one skilled in the art at the time of invention to modify the method and apparatus of Watts, Jr. et al. to specifically use a thermal diode in order to effect accurate temperature measurement in semiconductor devices.

***Allowable Subject Matter***

11. As best can be understood in view of the indefiniteness of the claims, claim 14 may be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

***Conclusion***

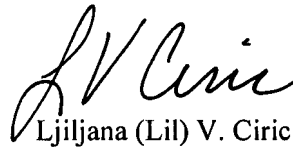
12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ljiljana (Lil) V. Ciric whose telephone number is 571-272-4909. The examiner works a flexible schedule but can normally be reached between the hours of 10:30 a.m. and 6:30 p.m. on most weekdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl J. Tyler can be reached on 571-272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained

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from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Ljiljana (Lil) V. Ciric  
Primary Examiner  
Art Unit 3744

lvc